५

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,485	10/01/2003	Robert Edward Markowitz	1014-041	7518

26652 7590 07/09/2007	EXAMINER
AT&T CORP. ROOM 2A207 ONE AT&T WAY BEDMINSTER, NJ 07921	LAZARO, DAVID R

ART UNIT	PAPER NUMBER
2155	

MAIL DATE	DELIVERY MODE
07/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/676,485	MARKOWITZ ET AL.
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 May 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 05/01/2007.

2. Claims 1, 2, 3, 4, 9, 11, 12, 13, 15-18 and 20-22 were amended.

3. Claims 1-22 are pending in this office action.

Terminal Disclaimer

4. The terminal disclaimer filed on 05/01/2007 disclaiming the terminal portion of

any patent granted on this application which would extend beyond the expiration date of

U.S. Patent 6,651,103 has been reviewed and is accepted. The terminal disclaimer has

been recorded.

Response to Amendment

5. The objection to the specification is withdrawn based on applicant's amendment.

6. The objection to claim 3 is withdrawn based on applicant's amendment.

7. The rejection of claim 4 under 35 U.S.C. 112, second paragraph, is withdrawn

based on applicant's amendment.

8. The double patent rejection of claims 1-3, 5, 7, 12-14, 16 and 18 is withdrawn

based on the Terminal Disclaimer.

9. Applicant's arguments with respect to claims 1-22 have been considered but are

moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.

Claim Rejections - 35 USC § 112

11.   Claims 1, 2, 9-13, 17, 18 and 20-22 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

12.   Claim 1 states the limitations "streaming media information", "the media

information missing information" and "sending a request to the media server for the

missing information". However, Claim 1 now claims two versions of the media

information. It is not clear as to which version of the media information these limitations

are referring. Similarly, Claims 4-9 are also unclear as they each claim "media

information" without any indication as to which version is being referenced.

13.   The examiner notes that the streaming and storing limitations of claim 1 are

presented in a fashion that is seemingly non-linear and not entirely cohesive. For

example, the amendment adds limitations regarding a user request for a first version of

the media information. The claim language is not clear as to whether this first version is

the media information being streamed in the first limitation of the claim. Furthermore,

the original claims were storing a copy of the media information being streamed to the

user, but now it seems only the second version of the media information is being stored.

However, based on the specification, it would seem the intent of the invention is to

cache both versions of the media information.

14.   Claim 10 states, "wherein the sending a request, receiving the missing

information and storing the missing information steps are performed immediately upon

identification of the missing information". This, however, contradicts the sending of the

request condition claimed in Claim 1. Specifically, claim 1 identifies that the sending of

the request is "responsive to an automatic determination that network congestion is

below a predetermined threshold". As such, it is not clear as to what applicant is

intending to claim in claim 10.

15.   Claim 11 states, "wherein the sending a request...are performed periodically".

This, however, seems to contradict the sending of the request condition claimed in claim

1. Specifically, claim 1 identifies that the sending of the request is "responsive to an

automatic determination that network congestion is below a predetermined threshold".

As such, it is not clear as to what applicant is intending to claim in claim 11.

16.   Claim 12 states the limitations, "wherein media information is streamed", "the

media information missing information" and "the controller sends a request to the media

server for the missing information". However, Claim 12 states that there are two

versions of the media information. It is not clear as to which version of the media

information these limitations are referring. Claims 15-20 are also unclear as they each

claim "media information" without any indication as to which version is being referenced.

17.   Similar to claim 1, the amendment to claim 12 adds limitations regarding a user

request for a first version of the media information. The claim language is not clear as

to whether this first version is the media information being streamed from the media

server to the user device. Furthermore, the original claims were storing a copy of the

media information being streamed to the user, but now it seems only the second version

of the media information is being stored. However, based on the specification, it would

seem the intent of the invention is to cache both versions of the media information.

18.   Claim 21 states the limitation, "wherein the controller sends the

request... immediately upon identification of the missing information". This, however,

contradicts the sending of the request condition claimed in Claim 12. Specifically, claim

12 identifies that the sending of the request is "responsive to an automatic

determination that network congestion is below a predetermined threshold". As such, it

is not clear as to what applicant is intending to claim in claim 21.

19.   Claim 22 states the limitation, "wherein the controller sends the

request... periodically". This, however, contradicts the sending of the request condition

claimed in Claim 12. Specifically, claim 12 identifies that the sending of the request is

"responsive to an automatic determination that network congestion is below a

predetermined threshold". As such, it is not clear as to what applicant is intending to

claim in claim 22.

20.   Claims 1, 2, 9, 12, 13, 17, 18, 20-22 each contain the limitation "missing

information specified to be comprised by the media information". It is not clear what

meaning was intended for this phrase. Applicant's remarks did not contain any

discussion as to why this particularly language was added to the identified claims.

Claim Rejections - 35 USC § 103

21.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

22.   Claims 1-4, 8-15 and 19-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent 6,185,625 by Tso et al. (Tso) in view of U.S.Patent

6,031,818 by Lo et al. (Lo) and U.S. Patent 4,912,703 by Sumida (Sumida).

23.   With respect to Claim 1, Tso teaches a method of increasing a quality of

streamed media information, comprising:

        streaming media information from a media server to a user device (Col. 11 lines

        6-17: network client receives media in streaming fashion);

        storing a copy of the media information in a storage device not directly connected

to the media server (Col. 11 lines 6-17 and col. 6 lines 13-26 and lines 46-60: server-

side cache is part of remote proxy which accesses internet media servers. stores

copies of original and scaled versions of media information), the copy automatically

requested responsive to a user request for the media information, the user request for a

first version of the media information associated with a first bandwidth, the copy being

for a second version of the media information associated with a second bandwidth (Col.

11 lines 6-17 and Col. 6 lines 27-45: cache stores both original and scaled versions,

even if only the original is requested. versions can be scaled based on bandwidth).

        Tso does not explicitly disclose the media information missing information

specified to be comprised by the media information and sending a request to the media

server for the missing information specified to be comprised by the media information,

the request responsive to an automatic determination that network congestion is below

a predetermined threshold, receiving the missing information and storing the missing

information in the copy of the media information in the storage device. Lo teaches a

streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes determining if a list of missing data packets is associated with one of the media information (Col. 5 lines 28-37: tables 220 and 210) and determining if a missing data packet flag is set (Col. 4 lines 24-44: valid_tag indicates missing data). The missing information can be subsequently requested and the media information is restored (In Lo: Col. 4 lines 5-23 and Col. 7 lines 22-38). Furthermore, Sumida teaches that network transmission can be responsive to a determination that network congestion is below a predetermined threshold (In Sumida: Col. 5 lines 27-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Tso and modify it as indicated by Lo and Sumida such that it further comprises the media information missing information specified to be comprised by the media information and sending a request to the media server for the missing information specified to be comprised by the media information, the request responsive to an automatic determination that network congestion is below a predetermined threshold, receiving the missing information specified to be comprised by the media information and storing the missing information specified to be comprised by the media information in the copy of the media information in the storage device. One would be motivated to have this, as there is need for a system which can retransmit missing information (In Lo: Col. 1 lines 47-50) and maintain efficient data transmissions (In Sumida: Col. 1 line 48 - Col. 2 line 10).

24.   With respect to claim 2, Tso further teaches identifying one or more versions of

the media information stored in the storage device that are missing information specified

to be comprised by the media information; and performing the sending and receiving

steps for each of the one or more versions of the media information (In Lo: Col. 4 line

53- Col. 5 line 5, Col. 4 lines 5-23 and Col. 7 lines 22-38: based on the logic of the

rejection of claim 1, the principals of Lo would apply to each scaled version of Tso -Col.

11 lines 6-17).

25.   With respect to claim 3, Tso further teaches wherein identifying one or more

versions of the media information includes at least one of determining if a list of missing

data packets is associated with the one or more versions of the media information and

determining if a missing data packet flag is set (In Lo: Col. 5 lines 28-37: tables 220 and

210 and Col. 4 lines 24-44).

26.   With respect to claim 4, Tso further teaches wherein sending a request to the

media server includes identifying missing data packets in the media information and

sending a request for only the identified missing data packets (In Lo: Col. 4 lines 5-23

and Col. 7 lines 22-38).

27.   With respect to claim 8, Tso further teaches wherein the media information

includes at least one of video and audio data (In Tso: Col. 10 lines 60-64).

28.   With respect to claim 9, Tso further teaches wherein the missing information

specified to be comprised by the media information is identified while the media

information is streamed from the media server to the user device (In Lo: Col. 3 lines 10-

25 and Col. 4 lines 5-23).

29.   With respect to claim 10, Tso further teaches wherein the sending a request,

receiving the missing information and storing the missing information steps are

performed upon identification of the missing information (In Lo: Col. 3 lines 10-25 and

Col. 4 lines 5-23).

30.   With respect to claim 11, Tso further teaches wherein the sending a request,

receiving the missing information and storing the missing information steps are

performed periodically (In Lo: Col. 4 line 53- Col. 5 line 5).

31.   With respect to claim 12, Tso teaches an apparatus that increases a quality of

streamed media information, comprising:

        a controller (Fig 4: remote proxy or encode manager); and

        a storage device not directly connected to a media server, wherein media

information is streamed from the media server to a user device and a copy of the media

information is stored in the storage device (Col. 11 lines 6-17: network client receives

media in streaming fashion), the copy automatically requested responsive to a user

request for the media information, the user request for a first version of the media

information associated with a first bandwidth, the copy a second version of the media

information associated with a second bandwidth (Col. 11 lines 6-17 and Col. 6 lines 27-

45: cache stores both original and scaled versions, even if only the original is requested.

versions can be scaled based on bandwidth).

        Tso does not explicitly disclose the media information missing information

specified to be comprised by the media information, and wherein the controller sends a

request to the media sever for the missing information specified to be comprised by the

media information, and stores the missing information specified to be comprised by the media information, in the storage device, the request responsive to an automatic determination that the network congestion is below a predetermined threshold. Lo teaches a streaming media invention that can determine and correct data missing from a media stream (See abstract). This includes determining if a list of missing data packets is associated with one of the media information (Col. 5 lines 28-37: tables 220 and 210) and determining if a missing data packet flag is set (Col. 4 lines 24-44: valid_tag indicates missing data). The missing information can be subsequently requested and the media information is restored (In Lo: Col. 4 lines 5-23 and Col. 7 lines 22-38). Furthermore, Sumida teaches that network transmission can be responsive to a determination that network congestion is below a predetermined threshold (In Sumida: Col. 5 lines 27-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Tso and modify it as indicated by Lo and Sumida such that it further comprises the media information missing information specified to be comprised by the media information, and wherein the controller sends a request to the media sever for the missing information specified to be comprised by the media information, and stores the missing information specified to be comprised by the media information, in the storage device, the request responsive to an automatic determination that the network congestion is below a predetermined threshold. One would be motivated to have this, as there is need for a system which

can retransmit missing information (In Lo: Col. 1 lines 47-50) and maintain efficient data transmissions (In Sumida: Col. 1 line 48 - Col. 2 line 10).

32.   With respect to claim 13, Tso further teaches wherein the controller identifies one or more versions of the media information stored in the storage device missing information specified to be comprised by the media information; and performing the sending and receiving steps for each of the one or more versions of the media information (In Lo: Col. 4 line 53- Col. 5 line 5, Col. 4 lines 5-23 and Col. 7 lines 22-38: based on the logic of the rejection of claim 1, the principals of Lo would apply to each scaled version of Tso -Col. 11 lines 6-17).

33.   With respect to claim 14, Tso further teaches wherein the controller identifies one or more versions of the media information includes at least one of determining if a list of missing data packets is associated with the one or more versions of the media information and determining if a missing data packet flag is set (In Lo: Col. 5 lines 28-37: tables 220 and 210 and Col. 4 lines 24-44).

34.   With respect to claim 15, Tso further teaches wherein the controller sends the request to the media server includes identifying missing data packets in the media information and the request is for only the identified missing data packets (In Lo: Col. 4 lines 5-23 and Col. 7 lines 22-38).

35.   With respect to claim 19, Tso further teaches wherein the media information includes at least one of video and audio data (In Tso: Col. 10 lines 60-64).

36.   With respect to claim 20, Tso further teaches wherein the controller identifies the missing information specified to be comprised by the media information while the media

information is streamed from the media server to the user device (In Lo: Col. 3 lines 10-

25 and Col. 4 lines 5-23).

37.   With respect to claim 21, Tso further teaches wherein the controller sends the

request, receives the missing information specified to be comprised by the media

information and stores the missing information specified to be comprised by the media

information immediately upon identification of the missing information (In Lo: Col. 3 lines

10-25 and Col. 4 lines 5-23).

38.   With respect to claim 22, Tso further teaches wherein the sends the request,

receives the missing information specified to be comprised by the media information

and stores the missing information specified to be comprised by the media information

steps are performed periodically (In Lo: Col. 4 line 53- Col. 5 line 5).

39.   Claims 5, 6, 16 and 17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Tso in view of Lo and Sumida and in further view of U.S. Patent

5,826,198 by Bergins et al. (Bergins).

40.   With respect to claim 5, Tso in view of Lo and Sumida does not explicitly disclose

wherein sending a request to the media server includes requesting transmission of the

entire media information.

         Bergins teaches requesting transmission of an entire media information (Col. 8

lines 9-12) as it may be beneficial for smaller sized media information.

         It would have been obvious to one of ordinay skill in the art at the time the

invention was made to take the method disclosed by Tso in view of Lo and Sumida and

modify it as indicated by Bergins such that it further comprises wherein sending a request to the media server includes requesting transmission of the entire media information. One would be motivated to have this, as the benefits would apply to any smaller sized media information disclosed by Tso (In Tso: Col. 6 lines 27-45).

41.   With respect to claim 6, Tso in view of Lo and Sumida further teaches wherein storing the missing information includes rewriting the entire retransmitted media information over the copy of the media information in the storage device (In Bergins: Col. 8 lines 9-12, file would replace any previous file attempt).

42.   With respect to claim 16, Tso in view of Lo and Sumida does not explicitly disclose wherein the controller sends a request to the media server by requesting retransmission of the entire media information.

Bergins teaches requesting transmission of an entire media information (Col. 8 lines 9-12) as it may be beneficial for smaller sized media information.

It would have been obvious to one of ordinay skill in the art at the time the invention was made to take the apparatus disclosed by Tso in view of Lo and Sumida and modify it as indicated by Bergins such that it further comprises wherein the controller sends a request to the media server by requesting retransmission of the entire media information. One would be motivated to have this, as the benefits would apply to any smaller sized media information disclosed by Tso (In Tso: Col. 6 lines 27-45).

43.   With respect to claim 17, Tso in view of Lo and Sumida further teaches wherein the controller stores the missing information specified to be comprised by the media information in the storage device by rewriting the entire retransmitted media information

over the copy of the media information in the storage device (In Bergins: Col. 8 lines 9-

12, file would replace any previous file attempt).

44.   Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

·Tso in view of Lo and Sumida and Bergins as applied to claims 9 and 20 above, and in

further view of U.S. Patent 6,463,509 by Teoman et al. (Teoman).

45.   With respect to claim 7, Tso in view of Lo and Sumida and Bergins does not

explicitly disclose wherein storing the missing information includes: storing the entire

retransmitted media information in the storage device; comparing a number of missing

data packets in the entire retransmitted media information with a number of missing

data packets in the copy of the media information; and retaining either the entire

retransmitted media information or the copy of the media information in the storage

device, whichever has fewer missing data packets.

Teoman teaches comparing two different entire versions of a data file and

retaining the copy of the data file that is most complete (Col. 14 lines 48-64).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to take the method disclosed by Tso in view of Lo and Sumida and

Bergins and modify it as indicated by Teoman such that it further comprises wherein

storing the missing information includes: storing the entire retransmitted media

information in the storage device; comparing a number of missing data packets in the

entire retransmitted media information with a number of missing data packets in the

copy of the media information; and retaining either the entire retransmitted media

information or the copy of the media information in the storage device, whichever has

fewer missing data packets. One would be motivated to have this, as it is desirable to

have a proper working version of the data file (In Teoman Col. 14 lines 48-64).

46.   With respect to claim 18, Tso in view of Lo and Sumida and Bergins does not

explicitly disclose wherein the controller stores the missing information specified to be

comprised by the media information in the storage device by: storing the entire

retransmitted media information in the storage device; comparing a number of missing

data packets in the entire retransmitted media information with a number of missing

data packets in the copy of the media information; and retaining either the entire

retransmitted media information or the copy of the media information in the storage

device, whichever has fewer missing data packets.

Teoman teaches comparing two different entire versions of a data file and

retaining the copy of the data file that is most complete (Col. 14 lines 48-64).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to take the apparatus disclosed by Tso in view of Lo and Sumida

and Bergins and modify it as indicated by Teoman such that it further comprises

wherein the controller stores the missing information specified to be comprised by the

media information in the storage device by: storing the entire retransmitted media

information in the storage device; comparing a number of missing data packets in the

entire retransmitted media information with a number of missing data packets in the

copy of the media information; and retaining either the entire retransmitted media

information or the copy of the media information in the storage device, whichever has

fewer missing data packets. One would be motivated to have this, as it is desirable to have a proper working version of the data file (In Teoman Col. 14 lines 48-64).

Conclusion

47.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Lazaro
June 28, 2007

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER